IN THE CLAIMS:

Claims 6 and 16 have been amended herein. All of the pending claims 1 through 27 are presented below. This listing of claims will replace all prior versions and listings in the application. Please enter these claims as amended.

Listing of Claims:

Claim 1 (Original) A method for creating at least one electrical pathway in a semiconductor device structure, comprising:

providing a semiconductor substrate; and

ablating one or more depressions in a surface of the semiconductor substrate to define the at least one electrical pathway.

Claim 2 (Original) The method of claim 1, further comprising:

depositing an electrically conductive material over the surface of the semiconductor substrate and into the one or more depressions; and

planarizing the electrically conductive material at least to the surface of the semiconductor substrate to laterally isolate the electrically conductive material in the one or more depressions.

Claim 3 (Original) The method of claim 2, further comprising etching the one or more depressions in the surface of the semiconductor substrate subsequent to ablating and prior to depositing the electrically conductive material over the surface of the semiconductor substrate.

Claim 4 (Original) The method of claim 1, wherein providing the semiconductor substrate comprises providing at least one of a silicon wafer, a silicon on insulator substrate, a silicon on sapphire substrate, an epitaxial layer of silicon on a base semiconductor foundation, a substrate comprising a layer of silicon-germanium, a substrate comprising a layer of germanium,

a substrate comprising a layer of gallium arsenide and a substrate comprising a layer of indium phosphide.

Claim 5 (Original) The method of claim 2, wherein depositing the electrically conductive material over the surface of the semiconductor substrate comprises depositing at least one of a metal, a conductive polymer and conductive nano-particles over the surface of the semiconductor substrate.

Claim 6 (Currently Amended) The method of claim 5, wherein depositing the at least one of the metal, the conductive polymer and the conductive nano-particles over the surface of the semiconductor substrate comprises depositing a metal selected from the group consisting of solder, aluminum, titanium, nickel, iridium, copper, gold, tungsten, silver, platinum, palladium, tantalum, ~~molybendum~~ molybdenum and alloys thereof over the surface of the semiconductor substrate.

Claim 7 (Original) The method of claim 5, wherein depositing the at least one of the metal, the conductive polymer and the conductive nano-particles over the surface of the semiconductor substrate comprises depositing a conductive polymer selected from the group consisting of a metal filled silicone and an isotropically conductive or conductor-filled epoxy over the surface of the semiconductor substrate.

Claim 8 (Original) The method of claim 1, wherein providing the semiconductor substrate comprises providing the semiconductor substrate and forming a film over at least a portion of the surface of the semiconductor substrate, and wherein ablating one or more depressions in the surface of the semiconductor substrate comprises ablating the one or more depressions at least partially through the film.

Claim 9 (Original) The method of claim 8, further comprising:
depositing an electrically conductive material over a surface of the film and into the one or more depressions; and
planarizing the electrically conductive material at least to the surface of the film to laterally isolate the electrically conductive material in the one or more depressions.

Claim 10 (Original) The method of claim 9, further comprising etching the one or more depressions in the film subsequent to ablating and prior to depositing the electrically conductive material over the surface of the film.

Claim 11 (Original) A method for creating at least one conductive element and at least one conductive structure in a semiconductor device structure, comprising:
providing a semiconductor substrate; and
substantially simultaneously ablating at least one depression in a surface of the semiconductor substrate to define the at least one conductive element and ablating at least one conductive structure precursor in the semiconductor substrate to define the at least one conductive structure.

Claim 12 (Original) The method of claim 11, further comprising:
depositing an electrically conductive material over the surface of the semiconductor substrate and into the at least one depression and the at least one conductive structure precursor; and
planarizing the electrically conductive material at least to the surface of the semiconductor substrate to laterally isolate the electrically conductive material in the at least one depression and the at least one conductive structure precursor.

Claim 13 (Original) The method of claim 16, further comprising etching the at least one depression and the at least one conductive structure precursor in the surface of the semiconductor substrate subsequent to ablating and prior to depositing the electrically conductive material over

the surface of the semiconductor substrate.

Claim 14 (Original) The method of claim 11, wherein providing the semiconductor substrate comprises providing at least one of a silicon wafer, a silicon on insulator substrate, a silicon on sapphire substrate, an epitaxial layer of silicon on a base semiconductor foundation, a substrate comprising a layer of silicon-germanium, a substrate comprising a layer of germanium, a substrate comprising a layer of gallium arsenide and a substrate comprising a layer of indium phosphide.

Claim 15 (Original) The method of claim 12, wherein depositing the electrically conductive material over the surface of the semiconductor substrate comprises depositing at least one of a metal, a conductive polymer and conductive nano-particles over the surface of the semiconductor substrate.

Claim 16 (Currently Amended) The method of claim 15, wherein depositing the at least one of the metal, the conductive polymer and conductive nano-particles over the surface of the semiconductor substrate comprises depositing a metal selected from the group consisting of solder, aluminum, titanium, nickel, iridium, copper, gold, tungsten, silver, platinum, palladium, tantalum, ~~molybendum~~ molybdenum and alloys thereof over the surface of the semiconductor substrate.

Claim 17 (Original) The method of claim 15, wherein depositing the at least one of the metal, the conductive polymer and conductive nano-particles over the surface of the semiconductor substrate comprises depositing a conductive polymer selected from the group consisting of a metal filled silicone and an isotropically conductive or conductor-filled epoxy over the surface of the semiconductor substrate.

Claim 18 (Original) The method of claim 11, wherein providing the semiconductor substrate comprises providing the semiconductor substrate and forming a film over at least a portion of the surface of the semiconductor substrate, and wherein ablating at least one depression and at least one conductive structure precursor in the surface of the semiconductor substrate comprises ablating the at least one depression and the at least one conductive structure precursor at least partially through the film.

Claim 19 (Original) The method of claim 18, wherein ablating at least one depression and at least one conductive structure precursor at least partially through the film comprises ablating the at least one conductive structure precursor through the film to expose an active area on the surface of the semiconductor substrate.

Claim 20 (Original) The method of claim 18, further comprising:

depositing an electrically conductive material over a surface of the film and into the at least one depression and the at least one conductive structure precursor; and

planarizing the electrically conductive material at least to the surface of the film to laterally isolate the electrically conductive material in the at least one depression and the at least one conductive structure precursor.

Claim 21 (Original) The method of claim 20, further comprising etching the at least one depression and the at least one conductive structure precursor subsequent to ablating and prior to depositing the electrically conductive material over the surface of the film.

Claim 22 (Original) A method for creating at least one electrical connection through a sidewall of a semiconductor device structure, comprising:

providing a semiconductor substrate; and

ablating one or more depressions in a surface of a sidewall of the semiconductor substrate to define the at least one electrical connection.

Claim 23 (Original) The method of claim 22, further comprising:

depositing an electrically conductive material over the surface of the sidewall of the semiconductor substrate and into the one or more depressions; and

planarizing the electrically conductive material at least to the surface of the sidewall of the semiconductor substrate to laterally isolate the electrically conductive material in the one or more depressions.

Claim 24 (Original) The method of claim 23, further comprising etching the one or more depressions in the surface of the sidewall of the semiconductor substrate subsequent to ablating and prior to depositing the electrically conductive material over the surface of the sidewall of the semiconductor substrate.

Claim 25 (Original) The method of claim 22, wherein providing the semiconductor substrate comprises providing the semiconductor substrate and forming a film over at least a portion of the surface of the sidewall of the semiconductor substrate, and wherein ablating one or more depressions in the surface of the sidewall of the semiconductor substrate comprises ablating the one or more depressions at least partially through the film.

Claim 26 (Original) The method of claim 25, further comprising:

depositing an electrically conductive material over a surface of the film and into the one or more depressions; and

planarizing the electrically conductive material at least to the surface of the film to laterally isolate the electrically conductive material in the one or more depressions.

Claim 27 (Original) The method of claim 26, further comprising etching the one or more depressions subsequent to ablating and prior to depositing the electrically conductive material over the surface of the film.

IN THE DRAWINGS:

Attached hereto are seven (7) annotated sheets of drawings which include changes to FIGs. 3E, 4E, 5B, 5E, 5F, 6B, 6D, 6E, and 6F. Also attached are seven (7) replacement sheets incorporating the above-referenced changes and including FIGs. 3C, 3D, 3E, 4E, 4F, 5A, 5B, 5C, 5D, 5E, 5F, 6A, 6B, 6C, 6D, 6E, 6F and 7. The replacement sheets replace the original sheets including 3C, 3D, 3E, 4E, 4F, 5A, 5B, 5C, 5D, 5E, 5F, 6A, 6B, 6C, 6D, 6E, 6F, and 7.